# **Complete Summary**

## **GUIDELINE TITLE**

Multiple gestation.

## BIBLIOGRAPHIC SOURCE(S)

Multiple gestation. Philadelphia (PA): Intracorp; 2005. Various p. [23 references]

## **GUIDELINE STATUS**

This is the current release of the guideline.

All Intracorp guidelines are reviewed annually and updated as necessary, but no less frequently than every 2 years. This guideline is effective from July 1, 2005 to July 1, 2007.

# **COMPLETE SUMMARY CONTENT**

SCOPE

METHODOLOGY - including Rating Scheme and Cost Analysis RECOMMENDATIONS
EVIDENCE SUPPORTING THE RECOMMENDATIONS
BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS IMPLEMENTATION OF THE GUIDELINE
INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES
IDENTIFYING INFORMATION AND AVAILABILITY
DISCLAIMER

## **SCOPE**

## DISEASE/CONDITION(S)

- Multiple gestation
- Maternal and fetal complications associated with multiple gestation, including pre-term labor

## **GUIDELINE CATEGORY**

Diagnosis Evaluation Management Prevention

CLINICAL SPECIALTY

Family Practice
Obstetrics and Gynecology

## INTENDED USERS

Allied Health Personnel Health Care Providers Health Plans Hospitals Managed Care Organizations Utilization Management

# GUIDELINE OBJECTIVE(S)

To present recommendations for the diagnosis and management of multiple gestation that will assist medical management leaders to make appropriate benefit coverage determinations

#### TARGET POPULATION

Pregnant women with more than one fetus

## INTERVENTIONS AND PRACTICES CONSIDERED

# Diagnosis/Evaluation

- 1. Physical examination and assessment of signs and symptoms
- 2. Diagnostic tests
  - Serum pregnancy test
  - Dipstick urinalysis
  - Complete blood count
  - Blood type and Rh factor
  - Serum glucose level
  - Serology for rubella, syphilis, hepatitis B, and varicella titers
  - Papanicolaou (PAP) smear
  - Fetal fibronectin tests
  - Ultrasonography

## Management/Prevention

- 1. Early monitoring
- 2. Selective reduction if desired
- 3. Prevention of preterm labor, including bed rest, tocolytic agents, cervical cerclage
- 4. Steroids if needed
- 5. Cesarean section if indicated
- 6. Postpartum vasoconstrictors
- 7. Referral to specialists

#### MAJOR OUTCOMES CONSIDERED

- Mortality rates for multiple-birth infants including very-low-birth-weight infants
- Risk and rate of complications of multiple gestation such as "stuck" twin and twin-to-twin transfusion syndrome (TTTS)
- Utility of diagnostic tests

## METHODOLOGY

## METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

#### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Searches were performed of the following resources: reviews by independent medical technology assessment vendors (such as the Cochrane Library, HAYES); PubMed; MD Consult; the Centers for Disease Control and Prevention (CDC); the U.S. Food and Drug Administration (FDA); professional society position statements and recommended guidelines; peer reviewed medical and technology publications and journals; medical journals by specialty; National Library of Medicine; Agency for Healthcare Research and Quality; Centers for Medicare and Medicaid Services; and Federal and State Jurisdictional mandates.

## NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Not Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not stated

METHODS USED TO ANALYZE THE EVI DENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus (Delphi)

# DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

A draft Clinical Resource Tool (CRT or guideline) is prepared by a primary researcher and presented to the Medical Technology Assessment Committee or the Intracorp Guideline Quality Committee, dependent upon guideline product type.

The Medical Technology Assessment Committee is the governing body for the assessment of emerging and evolving technology. This Committee is comprised of a Medical Technology Assessment Medical Director, the Benefit and Coverage Medical Director, CIGNA Pharmacy, physicians from across the enterprise, the Clinical Resource Unit staff, Legal Department, Operations, and Quality. The Intracorp Guideline Quality Committee is similarly staffed by Senior and Associate Disability Medical Directors.

Revisions are suggested and considered. A vote is taken for acceptance or denial of the CRT.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

**COST ANALYSIS** 

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Comparison with Guidelines from Other Groups Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

## RECOMMENDATIONS

#### MAJOR RECOMMENDATIONS

# **Diagnostic Confirmation**

Subjective Findings

Increased fetal activity

Objective Findings

Positive pregnancy test

- Large uterus for dates
- Weight gain may be greater than expected
- Two or more fetal heart tones
- May have elevated maternal serum alpha-fetoprotein (AFP)

## Diagnostic Tests

- Serum pregnancy test
- Dipstick urinalysis for protein and glucose
- Complete blood count
  - To detect maternal anemia
- Blood type and Rh factor
- Serum glucose level
  - To detect glucose abnormalities (e.g., gestational diabetes [see the Intracorp guideline Gestational Diabetes] or hypoglycemia)
- Serology for rubella, syphilis, hepatitis B, and varicella titers if uncertain history
- Papanicolaou (PAP) smear
- Cervical smear to detect presence of fetal fibronectin (if present at 24 weeks gestation, it is a useful marker for the prediction of preterm delivery)
- Ultrasonography to verify the presence of more then one fetus
  - This may be done transvaginally as early as 4 weeks.
  - Ultrasonography is also essential for determining the position of the fetuses and number of fetuses.

# Differential Diagnosis

- Single pregnancy (dates incorrect)
- Uterine size (may be misleading if due date incorrectly calculated)
- Excess amniotic fluid
- Hydatidiform mole (gestation trophoblastic tumor)
- Uterine fibroids
- Fetus papyraceous (multiple gestation in which one fetus dies)

#### Treatment

# Treatment Options

- Early monitoring
- Cervical cerclage for incompetent cervix and to prolong the gestation of the fetuses
- Selective reduction a procedure in which the total number of fetuses is reduced
  - This procedure is generally offered when three or more fetuses are present. NOTE: that the decision to perform this procedure is to be made by the mother and significant other. Teaching should include informing the patient that this procedure does not guarantee that the remaining fetus or fetuses will be carried to term or be born free of health problems.
- Bed rest if the woman is experiencing preterm labor: if bed rest is not decreasing the quality or quantity of the uterine contractions, a tocolytic may be considered if under 37 weeks gestation.

- Consider steroids to promote fetal lung maturity between 24 and 33 weeks.
- If 32-34 weeks gestation is reached without need for emergent delivery, phospholipid analysis of amniotic fluid should be used to determine fetal lung maturity.
- Cesarean section if indicated. The indications include fetal distress and fetal positioning not conducive to easy and safe delivery.
- Postpartum vasoconstrictors to prevent uterine bleeding

#### **Duration of Medical Treatment**

Medical - Optimal: 360 day(s), Maximal: 420 day(s)

Additional information regarding primary care visit schedules, referral options, and specialty care is provided in the original guideline document.

The original guideline document also provides a list of red flags that may affect disability duration, and return to work goals, including

- After uncomplicated vaginal delivery
- After cesarean section (c-section)

## CLINICAL ALGORITHM(S)

None provided

## EVIDENCE SUPPORTING THE RECOMMENDATIONS

## TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

# BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

## POTENTIAL BENEFITS

Appropriate diagnosis and management of multiple gestation that will assist medical management leaders to make appropriate benefit coverage determinations

## POTENTIAL HARMS

Cervical cerclage placement should be limited to women with either a strong suggestive history or with objectively documented cervical incompetence, since this surgical procedure may be associated with adverse sequelae for both the mother and her fetuses.

## IMPLEMENTATION OF THE GUIDELINE

## DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

# INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

**IOM CARE NEED** 

Staying Healthy

IOM DOMAIN

Effectiveness

# IDENTIFYING INFORMATION AND AVAILABILITY

# BIBLIOGRAPHIC SOURCE(S)

Multiple gestation. Philadelphia (PA): Intracorp; 2005. Various p. [23 references]

**ADAPTATION** 

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2005

GUIDELINE DEVELOPER(S)

Intracorp - Public For Profit Organization

SOURCE(S) OF FUNDING

Intracorp

**GUI DELI NE COMMITTEE** 

CIGNA Clinical Resources Unit (CRU)
Intracorp Disability Clinical Advisory Team (DCAT)
Medical Technology Assessment Committee (MTAC)
Intracorp Guideline Quality Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Not stated

## FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

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## AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Policies and procedures. Medical Technology Assessment Committee Review Process. Philadelphia (PA): Intracorp; 2004. 4 p.
- Online guideline user trial. Register for Claims Toolbox access at <a href="https://www.intracorp.com">www.intracorp.com</a>.

Licensing information and pricing: Available from Intracorp, 1601 Chestnut Street, TL-09C, Philadelphia, PA 19192; e-mail: <a href="mailto:lbowman@mail.intracorp.com">lbowman@mail.intracorp.com</a>.

# PATIENT RESOURCES

None available

# NGC STATUS

This NGC summary was completed by ECRI on September 15, 2005. The information was verified by the guideline developer on September 30, 2005.

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